

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP 2004/007291

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12P35/04 C07D501/00 C12N9/84 C12N11/04

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12P C07D C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, EMBASE, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 97/04086 A (GIST BROCADES BV ; VROOM ERIK DE (NL)) 6 February 1997 (1997-02-06) cited in the application claims 6-9; example 4; tables 4.1,4.2 -----	1-11, 14-18,31
X	US 4 073 687 A (KONDO EIJI ET AL) 14 February 1978 (1978-02-14) claim 1; example 7 -----	1-9, 14-18,31
X	WO 99/24441 A (HEITMANN HERWARDT ; VROOM ERIK DE (NL); GIST BROCADES BV (NL); ROY PET) 20 May 1999 (1999-05-20) page 4, line 28 - page 5, line 4; claims 1,4,5,7,13 ----- -/-	1-4,19, 20, 23-26,30

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
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- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

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- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- \*Z\* document member of the same patent family

Date of the actual completion of the international search

12 January 2005

Date of mailing of the international search report

117.03.05

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>WO 98/56944 A (VROOM ERIK DE ; WILMS JOHANNES (NL); GIST BROCADES BV (NL)) 17 December 1998 (1998-12-17)</p> <p>abstract; claims 1,2 page 1, line 20 - line 25 page 2, line 2 page 4, line 9 - line 13 page 9, line 13 - line 14 page 11, line 29 - page 12, line 6 page 12, line 16 - line 23 page 21, line 27 - page 22, line 11</p>	<p>1-4, 8-11, 13-15, 18-20, 26,27, 29-31</p>
X	<p>WO 96/02663 A (GIST BROCADES BV ; CLAUSEN KIM (DK); DEKKERS ROCUS MARINUS (NL)) 1 February 1996 (1996-02-01) claims 1,9,14; table 2 page 7, line 19 page 7, line 29 - line 35 page 8, line 24 - page 9, line 20 page 9, line 24 - line 33</p>	<p>1-4, 6-11, 13-17</p>
X	<p>WO 99/31109 A (DSM NV ; GELDER RENE DE (NL); KEMPERMAN GERJAN (NL); RAEMAKERS FRANKEN) 24 June 1999 (1999-06-24) page 1, line 27 - line 32; claims 1,3 page 4, line 25 - line 32 page 5, line 1 - line 7 page 5, line 23 - line 29 page 6, line 28 - line 31</p>	<p>1-4, 6-17,21</p>
Y	<p>US 5 034 522 A (SCHREIBER FRED G) 23 July 1991 (1991-07-23) abstract; claims 1,3,11,13; example 5 column 4, line 49 - line 62 column 6, line 20 - line 25 column 6, line 56 - line 60</p>	<p>19,20, 24-31</p>
Y	<p>US 3 819 620 A (DUERSCH F ET AL) 25 June 1974 (1974-06-25) column 3, line 64 - column 4, line 75; claims 1,2</p>	<p>19,20, 24-31</p>
Y	<p>US 3 485 819 A (BACH GEORGES GUSTAV ET AL) 23 December 1969 (1969-12-23) claim 4; examples 1,5</p>	<p>19,20, 25,26</p>
A	<p>EP 0 997 199 A (DSM NV) 3 May 2000 (2000-05-03) page 4, line 35 - line 36; claims 1,11 page 5, line 38 - line 39 page 5, line 54 - line 55</p>	<p>1-31</p>
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WO 03/055998 A (ALKEMA WYNAND BERNLEF LIUDGER ; BOESTEN WILHELMUS H J (NL); DOOREN VAN) 10 July 2003 (2003-07-10) cited in the application abstract; claims 5-8; examples A,2,3,C page 2, line 9 page 2, line 21 page 10, line 12 - line 13 page 10, line 17 page 10, line 20 - line 32	1-4,6-18
X	WO 91/00865 A (GEMA SA) 24 January 1991 (1991-01-24) claims 5,7 page 3, line 34 - page 4, line 6 page 4, line 29 - line 31 page 5, line 5 - line 25	24,25, 29,31
P,X	WO 03/055892 A1 (DSM N.V., NETH.) 10 July 2003 (2003-07-10) page 5, line 12 - line 15; claims 12,15 page 6, line 24 - line 25	24,25, 29,31

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## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☒ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:  
1-31
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

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